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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/820,341

Applicant(s)

COOPER ET AL.

Examiner

OLUJIMI A. ADESANYA

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Arguments

2. Applicant's arguments with respect to **claims 1, 8 and 15 and hence 2-7, 9-14 and 16-18** have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In particular the claim recite the limitation "multiple terms that are matched by other concepts that contain all of the multiple terms contained in the set" in In 4-5. This is contrary to pg 11, par [0038] In 5 -pg 12, In 1 which discloses the multiple terms are matched by other concepts that contain variants of synonyms of the multiple terms and not only all the multiple terms.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular the claims recite "and other relationships..." in ln 7-8 which renders the scope of the claims indefinite.

Claim Rejections - 35 USC § 103

1. **Claims 1-5, 7 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Li in view of Busch et al WIPO 2002/035376 A2 ("Busch")

Regarding **claim 1**, Li teaches a system for generating a response comprising: a language analysis module configured to parse a query into elements (col. 11, 11. 20-24, "Fig. 6 shows...A query 'retrieve documents containing the words car and dealer' is rewritten as shown by adding additional words relevant to car and dealer"; parsing the query into "car" and "dealer");

a rules engine coupled to said language analysis module to receive said elements and configured to compare a condition of a rule against said elements, said rule configured to perform an action to retrieve information (col. 11, 11.20-36, teaches, after receiving said elements, "relevant words of semantic similarity and syntactic co-occurrence relationship are determined from tables in Fig. 3");

a response generator coupled to said rules engine and configured to retrieve said information for presentation in a portion of a display that adjusts proportionately to the degree of importance of said information (col. 13, 11.37-63, teaches "matching

keywords are retrieved for ranking...rank their degrees of relevance...ranked based on the degrees of relaxation in matching words in the document with words in the query..."; Fig. 8).

Li does not explicitly disclose an ontology based concept repository configured to link a plurality of concepts at multiple different concept domain layers, wherein the concepts associated with the different domain layers are represented by one or more natural language words and the concepts for higher concept domain layers are represented by one or more natural language words having more specific terms than the one or more natural language words representing the concepts associated with the lower domain layers

However this feature is well known as is evidenced by Busch who teaches: an ontology based concept repository configured to link a plurality of concepts at multiple different concept domain layers, wherein the concepts associated with the different domain layers are represented by one or more natural language words and the concepts for higher concept domain layers are represented by one or more natural language words having more specific terms than the one or more natural language words representing the concepts associated with the lower domain layers (Abstract; deeper, the higher the level....the more specific the concept is, pg 25 In 35-pg 26, In 2; level 1, level 2...etc, fig 4; fig 7; wheat and rye, more specific than bread of food).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to utilize an ontology based concept repository configured to link a plurality of concepts at multiple different concept domain layers, wherein the concepts associated

with the different domain layers are represented by one or more natural language words and the concepts for higher concept domain layers are represented by one or more natural language words having more specific terms than the one or more natural language words representing the concepts associated with the lower domain layers, so as to provide a simple knowledge-base-style representation format for the manipulation of natural language documents (Busch, pg 6, ln 6-9).

Regarding **claim 2**, Li and Busch disclose the system of claim 1,

Li does not explicitly disclose wherein the concepts are classified as a noun, verb, adjective or adverb

However this feature is well known as is evidenced by Busch who teaches:

wherein the concepts are classified as a noun, verb, adjective or adverb (fig 7; pg 26, ln 25-28).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to utilize a system wherein the concepts are classified as a noun, so as to provide a way of identifying the part of speech the concepts belong to (Busch, tagged, part-of-speech, Abstract)

Regarding **claim 3**, Li and Busch disclose the system of claim 1

Li does not explicitly disclose wherein at least some of the plurality of concepts are further defined as a rigid phrase that is matched by any punctuation and/or inflectional variant of the rigid phrase, **or** defined as a compositional phrase that includes a set of multiple terms that are matched by other concepts that contain all of the multiple terms contained in the set

However, this feature is well known as is evidenced by Busch who teaches:

wherein at least some of the plurality of concepts are further defined as a rigid phrase that is matched by any punctuation and/or inflectional variant of the rigid phrase, or defined as a compositional phrase that includes a set of multiple terms that are matched by other concepts that contain all of the multiple terms contained in the set (The octopus has a heart..., pg 32, ln 6-17; question: Do octopuses have hearts? Do-verb octopus-noun have-verb heart-noun... pg 33, ln 9-17; matched, retrieval, pg 33, ln 27-34, The octopus has a heart as compositional phrase, Do, octopus, have, heart as terms of the parsed phrase, octopus, heart as concepts).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to utilize a system wherein at least some of the plurality of concepts are further defined as a rigid phrase that is matched by any punctuation and/or inflectional variant of the rigid phrase, **or** defined as a compositional phrase that includes a set of multiple terms that are matched by other concepts that contain all of the multiple terms contained in the set, so as to provide a simple knowledge-base-style representation format for the manipulation of natural language documents (Busch, pg 6, ln 6-9).

Regarding **claim 4**, Li and Busch disclose the system of claim 1.

Li does not explicitly disclose wherein a concept at a first concept domain layer comprises a natural language term that describes all of the natural language terms associated with the concepts in a second linked concept domain layer

However this feature is well known as is evidenced by Busch who teaches:

wherein a concept at a first concept domain layer comprises a natural language term that describes all of the natural language terms associated with the concepts in a second linked concept domain layer (fig 4; Bread, wheat, rye, fig 7, concept Bread describes the bread types wheat and Rye)

At the time of the invention, it would have been obvious to one of ordinary skill in the art to utilize a system wherein a concept at a first concept domain layer comprises a natural language term that describes all of the natural language terms associated with the concepts in a second linked concept domain layer, so as to provide a simple knowledge-base-style representation format for the manipulation of natural language documents (Busch, pg 6, ln 6-9).

Regarding **claim 5**, Li and Busch disclose the system of claim 4

Li teaches a response formatter configured to generate said portion of said display, wherein said portion is adjusted based on a scope of said information (col. 13, line 64 - col. 14, line 5).

Regarding **claim 7**, Li and Busch disclose the system of claim 1,

Li discloses wherein said response generator determines the importance of said information based on a quantifiable measure distinguishable from other actions of other rules, where said quantifiable measure is determined by one or more of a relative weight determinator, an accumulator relevancy determinator, a recency module, and a scope-based scorer (col. 13, line 64 - col. 14, line 10, teaches candidates are ranked based on the degrees of relaxation in matching words in the document with words in the query, "...exactly match, match through semantically query relaxation, match through

syntactically query relaxation and do not match..." and "ranking (scores) for M documents").

Regarding **claim 22**, Li and Busch disclose the system of claim 1

Li does not explicitly disclose wherein the rules engine further comprises rules having conditions that either refer to children of concepts or refer to children of children of concepts.

However this feature is well known as is evidenced by Busch who teaches: wherein the rules engine further comprises rules having conditions that either refer to children of concepts or refer to children of children of concepts (rules, Abstract; pg 27, In 20-30; fig 7, bread as a child of Food, wheat and Rye as children of children of Food)

At the time of the invention, it would have been obvious to one of ordinary skill in the art to utilize the rules engine in the method of Busch wherein the rules engine further comprises rules having conditions that either refer to children of concepts or refer to children of children of concepts, so as to provide a simple knowledge-base-style representation format for the manipulation of natural language documents (Busch, pg 6, In 6-9).

2. **Claims 6 and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Li in view of Busch as applied to claim 4 above, and further in view of Madhavan et al ("Semantic Mappings for Data Mediation") ("Madhavan")

Regarding **claim 6**, Li and Busch disclose the system of claim 1.

Li does not explicitly disclose wherein at least some of the concepts include a part of speech identifier that identifies a type of word class, a domain identifier identifying one of multiple different concept levels assigned to the concept or a headword that identifies a collection of synonyms and other relationships that define the concept

However these features are well known as is evidenced by **Busch** who teaches:

a part of speech identifier that identifies a type of word class (tagged, part-of-speech information, Abstract);

a domain identifier identifying one of multiple different concept levels assigned to the concept (fig 4, fig 7; position of that node...pg 25, ln 27-34); and

and **Madhavan** who teaches:

a headword that identifies a collection of synonyms and other relationships that define the concept (Faculty, Assistant Professor, Associate Professor, Professor, pg/slide 13, Faculty as Headword, Assistant Professor, Associate Professor, Professor as synonymous forms of professors related to the faculty).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to utilize a system/method wherein at least some of the concepts include a part of speech identifier that identifies a type of word class, a domain identifier identifying one of multiple different concept levels assigned to the concept or a headword that identifies a collection of synonyms and other relationships that define the concept, so as to provide a simple knowledge-base-style representation format for the manipulation of natural language documents (Busch, pg 6, ln 6-9).

Regarding **claim 21**, Li and Busch disclose the system of claim 1

Li does not explicitly disclose wherein the rules engine further comprises rules that compare the query with a part of speech identifier in the concepts, the part of speech identifier identifying a type of word class for the concepts, a domain identifier identifying at least one of multiple different concepts levels for the concepts, and a headword that identifies a collection of synonyms and other relationships that define the concepts.

However, these features are well known as is evidenced by Busch who teaches: rules that compare the query with a part of speech identifier in the concepts and the part of speech identifier identifying a type of word class for the concepts (tagged, part-of-speech information, Abstract; pg 32, ln 6 - pg 33, ln 34); a domain identifier identifying at least one of multiple different concepts levels for the concepts (fig 4, fig 7; position of that node...pg 25, ln 27-34)

and **Madhavan** who teaches:

a headword that identifies a collection of synonyms and other relationships that define the concept (Faculty, Assistant Professor, Associate Professor, Professor, pg/slide 13, Faculty as Headword, Assistant Professor, Associate Professor, Professor as synonymous forms of professors related to the faculty).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to utilize a system/method wherein at least some of the concepts include a part of speech identifier that identifies a type of word class, a domain identifier identifying one of multiple different concept levels assigned to the concept or a headword that identifies a collection of synonyms and other relationships that define the concept, so as to

provide a simple knowledge-base-style representation format for the manipulation of natural language documents (Busch, pg 6, ln 6-9).

3. **Claims 11-14 and 17-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Busch in view of Li ('892).

Regarding **claims 11 and 17**, Busch teaches the method of claims 8 and 15, Busch does not explicitly teach wherein parsing said query further comprises comparing a set of rules against said elements and determining that one or more of said elements satisfy a condition of a rule of said set of rules; and identifying an action associated with said rule

However, this feature is well known as is evidenced by **Li** who teaches: comparing a set of rules against said elements and determining that one or more of said elements satisfy a condition of a rule of said set of rules; and identifying an action associated with said rule (col. 11, 11.20-24, "Fig. 6 shows...A query 'retrieve documents containing the words car and dealer' is rewritten as shown by adding additional words relevant to car and dealer"; parsing the query into "car" and "dealer"; col. 11, 11.20-36, teaches, after receiving said elements, "relevant words of semantic similarity and syntactic co-occurrence relationship are determined from tables in Fig. 3...multi-granularity query expansion").

At the time of the invention, it would have been obvious to one of ordinary skill in the art to utilize the method of Busch with Li in comparing a set of rules against said elements and determining that one or more of said elements satisfy a condition of a rule

of said set of rules; and identifying an action associated with said rule, so as to present the user with matches based on the comparison (Li, col. 11, ln 20-24)

Regarding **claims 12 and 18**, Busch teaches the method of claim 8

Busch does not explicitly teach wherein retrieving said units of information further comprises evaluating the importance of each of said units to form said response to said query

However, this feature is well known as is evidenced by **Li** who teaches:

wherein retrieving said units of information further comprises evaluating the importance of each of said units to form said response to said query (col. 13, 11.37-63, teaches "matching keywords are retrieved for ranking...rank their degrees of relevance...ranked based on the degrees of relaxation in matching words in the document with words in the query..."; Fig. 8).

At the time of the invention it would have been obvious to one of ordinary skill in the art to utilize the method of Busch with Li in evaluating the importance of each of said units to form said response to said query, so as to present the user with the top best matches in form of ranks, based on the comparison (Li, col. 11, ln 20-24)

Regarding **claim 13**, Busch teaches the method of claim 8

Busch does not explicitly teach wherein the importance of at least one of said units is based on the relevancy of the identified concept to a document

However, this feature is well known as is evidenced by Li who teaches:

wherein the importance of at least one of said units is based on the relevancy of the identified concept to a document (col. 13, line 64 - col. 14, line 10, teaches candidates

are ranked based on the degrees of relaxation in matching words in the document with words in the query, "...exactly match, match through semantically query relaxation, match through syntactically query relaxation and do not match..." and "ranking (scores) for M documents").

At the time of the invention it would have been obvious to one of ordinary skill in the art to utilize the method of Busch with Li in determining the importance of at least one of said units is based on the relevancy of the identified concept to a document, so as to present the user with the top best matches in form of ranks, based on the comparison (Li, col. 11, ln 20-24)

Regarding **claim 14**, Busch and Li teach the method of claim 12

Busch does not explicitly teach wherein generating said plurality of portions further comprises scoring various scopes of said units of information

However, this feature is well known as is evidenced by Li who teaches:

wherein generating said plurality of portions further comprises scoring various scopes of said units of information (col. 13, line 64 - col. 14, line 10, teaches candidates are ranked based on the degrees of relaxation in matching words in the document with words in the query, "...exactly match, match through semantically query relaxation, match through syntactically query relaxation and do not match..." and "ranking (scores) for M documents").

At the time of the invention it would have been obvious to one of ordinary skill in the art to utilize the method of Busch with Li in generating said plurality of portions further comprises scoring various scopes of said units of information so as to present the user

with the top best matches in form of scores, based on the comparison (Li, col. 11, ln 20-24)

4. **Claims 10 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Busch in view of Li ('892) and Wakefield ('892)

Regarding **claims 10 and 16**, Busch teaches the method of claims 8 and 15,

Busch does not explicitly teach storing managed answers and generating at least one index for retrieving information from either said imported content or said stored managed answers or importing structured and unstructured content

However this feature is well known as is evidenced by Li who teaches: storing managed answers and generating at least one index for retrieving information from either said imported content or said stored managed answers (col. 15, 11, 12-19, teaches, "a database for storing a collection of documents..., database may include an index for storing concepts (e.g. semantical or syntactical concepts) and their relationships to the documents in the collection").

and **Wakefield** who suggests

importing structured and unstructured content (Fig. 2 illustrates an exemplary method of integrating relationally structured data with unstructured data; paragraph 56 and 58).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to combine the teaching elements of Busch with Li and Wakefield to import structured and unstructured content and to store managed answers and generating at least one index for retrieving information from either said imported content or said

stored managed answers because Wakefield teaches in paragraph 49, "[r]elationally structured data, however, may only represent a portion of the data collected by an organization..., amount of unstructured data available may often exceed the amount of structured data"; and paragraph 63 provides examples of how various organizations would benefit from Wakefield's systems and methods for providing a mixed data integration service and to present the user with matches based on the comparison of the queries and the stored documents (Li, col. 11, ln 20-24).

5. **Claim 19** is rejected under 35 U.S.C. 103(a) as being unpatentable over Li and Bush as applied to claim 1, and further in view of Starzl et al US 2002/0103809 A1 ("Starzl")

Regarding **claim 19** Li and Busch disclose the system of claim 1

Li does not explicitly disclose wherein the rules engine further comprises range operators that specify a scope or amount of surrounding text in the query that is compared with specified expressions of the rules

However, this feature is well known as is evidenced by Starzl who teaches: wherein the rules engine further comprises range operators that specify a scope or amount of surrounding text in the query that is compared with specified expressions of the rules (predefined number, par. [0081])

At the time of the invention it would have been obvious to one of ordinary skill in the art to utilize the rules engine in the method of Busch with Starzl wherein the rules engine further comprises range operators that specify a scope or amount of surrounding

text in the query that is compared with specified expressions of the rules, so as to present the user with the text search results within the specified proximity comparison (Starzl, par. [0081]))

6. **Claim 20** is rejected under 35 U.S.C. 103(a) as being unpatentable over Li and Bush as applied to claim 1, and further in view of Hwang et al US 2002/0078090 A1 ("Hwang")

Regarding **claim 20**, Li and Busch disclose the system of claim 1

Li does not explicitly disclose wherein the rules engine further comprises business condition modules that contain personal user query history information and personal user demographic information and triggers rules having associated condition modules corresponding with the query.

However, this feature is well known as is evidenced by Hwang who teaches: business condition modules that contain personal user query history information and personal user demographic information and triggers rules having associated condition modules corresponding with the query (profile, areas(s) of interest, History of the user's information, concept terms that occur in ...ontology, par. [0024] - par. [0025], user's area of information as a distribution of demographic information)

At the time of the invention it would have been obvious to one of ordinary skill in the art to utilize the rules engine in the method of Busch with Hwang wherein the rules engine further comprises range operators that specify a scope or amount of surrounding

text in the query that is compared with specified expressions of the rules, so as to determine the relevance of the retrieved document to the user's interest (par. [0029])

Claim Rejections - 35 USC § 102

Claims 8, 9 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Busch

Regarding **claim 8**, Busch teaches a method and computer readable medium for generating a response comprising:

associating a plurality of different concepts together at multiple different concept domain layers, wherein the concepts for different concept domain layers are represented by natural language words having different specificity of terms for the associated concepts than the terms in the natural language words representing concepts in other concept domain layers (Abstract; deeper, the higher the level....the more specific the concept is, pg 25 In 35-pg 26, In 2; level 1, level 2...etc, fig 4; fig 7; wheat and rye, more specific than bread of food);

establishing relationships among an identified concept at a first concept domain layer and other concepts at other different concept domain layers, where the identified concept at the first concept domain layer uses a broader more generic natural language term for the concept and at said some of the other concepts at other different domain layers terms that are more specific to an organization (Abstract; deeper, the higher the level....the more specific the concept is, pg 25 In 35-pg 26, In 2; level 1, level 2...etc, fig 4; fig 7; wheat and rye, more specific than bread or food, food more generic than Bread,

Bread more generic than wheat or Rye, Level 1, Level 2,...etc as different domain layers, Bread as identified concept);

creating a semantic index that uses the identified concept and the other associated concepts for identifying information (The octopus has a heart, pg 32, In 6-17, octopus and heart as identified noun concepts indexed with part of speech information);

parsing a query into elements, where at least one of said elements corresponds to the identified concept (question: Do octopuses have hearts? Do-verb octopus-noun have-verb heart-noun pg 33, In 9-17, Do, octopus, have, heart as elements of the parsed query/question, octopus, heart as concepts);

retrieving units of information using said semantic index (matched, retrieval, pg 33, In 27-34); and

generating a plurality of portions of a display, each of which presents information based on the importance of a corresponding unit of said information (fig 4, fig 7, wheat and rye, more specific than bread or food, food more generic than Bread, Bread more generic than wheat or Rye, Level 1, Level 2)

Regarding **claim 9**, Busch teaches the method of claim 8 further comprising associating the identified concept with a natural language term associated with the first concept domain layer, an industry-specific term associated with a second concept domain layer, and an organization-specific term associated with a third concept domain layer (pg 25 In 35-pg 26, In 2; level 1, level 2...etc, fig 4; fig 7; transportation, vehicle, car, Ford, pg 21, In 4-20, wheat and rye, more specific than bread or food, food more generic than Bread, Bread more generic than wheat or Rye, Level 1, Level 2,...etc as

different domain layers, Bread as identified concept, Ford as specific term to a car dealer organization as opposed to Transportation).

Regarding **claims 15**, Busch teaches a computer readable medium for generating a response comprising:

Instructions to associate a plurality of different concepts together at multiple different concept domain layers, wherein the concepts for different concept domain layers are represented by natural language words having different specificity of terms for the associated concepts than the terms in the natural language words representing concepts in other concept domain layers (Abstract; deeper, the higher the level....the more specific the concept is, pg 25 ln 35-pg 26, ln 2; level 1, level 2...etc, fig 4; fig 7; wheat and rye, more specific than bread of food);

Instructions to establish relationships among an identified concept at a first concept domain layer and other concepts at other different concept domain layers, where at least one of said concepts at a second concept domain layer is associated with a natural language specific to an organization and the identified concept at the first concept domain layer is associated with a more generic natural language term that is not specific to the organization (Abstract; deeper, the higher the level....the more specific the concept is, pg 25 ln 35-pg 26, ln 2; level 1, level 2...etc, fig 4; fig 7; transportation, vehicle, car, Ford, pg 21, ln 4-20, wheat and rye, more specific than bread or food, food more generic than Bread, Bread more generic than wheat or Rye, Level 1, Level 2,...etc as different domain layers, Bread as identified concept, Ford as specific term to a car dealer organization as opposed to Transportation);

Instructions to create a semantic index that uses the identified concept and the other associated concepts for identifying information (The octopus has a heart, pg 32, ln 6-17, octopus and heart as identified noun concepts indexed with part of speech information);

Instructions to parse a query into elements, where at least one of said elements corresponds to the identified concept (question: Do octopuses have hearts? Do-verb octopus-noun have-verb heart-noun pg 33, ln 9-17, Do, octopus, have, heart as elements of the parsed query/question, octopus, heart as concepts);

Instructions to retrieve units of information using said semantic index (matched, retrieval, pg 33, ln 27-34); and

Instructions to generate a plurality of portions of a display, each of which presents information based on the importance of a corresponding unit of said information (fig 4, fig 7, wheat and rye, more specific than bread or food, food more generic than Bread, Bread more generic than wheat or Rye, Level 1, Level 2).

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUJIMI A. ADESANYA whose telephone number is 571-270-3307. The examiner can normally be reached on Monday-Friday 7.30a.m - 5.00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHEMOND DORVIL can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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